

# Arkansas Health Information Exchange Finance Workgroup



**FEBRUARY 26, 2010**  
**ARKANSAS CENTER FOR HEALTH  
IMPROVEMENT**  
**MAIN CONFERENCE ROOM**  
**8:30 AM TO 10:30 AM**



# Welcome & Introductions



# Rate Selection Forms

## Disclosure Form & Ethical Standards



# Financial Principles for HIE

## Arkansas' HIE: SHARE: State Health Alliance for Records Exchange

# Other States' Principles – Florida



- The cost of entry into the State HIE solution should be minimized for healthcare providers, the cost of access to the State HIE solution should not become a barrier.
- Long term funding of the State HIE operational cost, beyond the ARRA grant funding cannot be borne by health care providers.
- The largest financial benefactor of the adoption of health information technology and the exchange of health information technology will be health insurers/payors; therefore, consideration should be given to aligning their cost benefit.
- The State HIE plan should require minimal initial capital investment as well as ongoing operational cost, previous investments in health information exchange should be maximized and duplication of investment and efforts should be minimized.
- Pricing of services will be based on the value of these services to stakeholders and their willingness to pay. This must go well beyond public/private funding mechanisms. An electronic information marketplace must have buyers and sellers to ensure financial sustainability

# Other States' Principles – Maryland



- State monies should be leveraged to achieve a sustainable business model.
- The participants in the statewide HIE will be willing to pay fees relative to the value they gain from using the exchange.
- The value of EHR adoption and HIE participation by physicians has been markedly increased by the Medicare and Medicaid payment incentives for meaningful use.
- The financial model should not rely on grant funding, even though grants may be available for future projects and expansions.
- Revenue should not be sought disproportionately from any one stakeholder or group of stakeholders.
- Properly developed subscription fee models that incentivize higher utilization of HIE services can provide stability in revenue planning.

# Other States' Principles – Pennsylvania



- Assure sufficient state match for federal ARRA funding for initial planning and implementation costs for Pennsylvania Health Information Exchange (PHIX).
- Create a sustainable business model including public/private financing mechanisms for PHIX.
- Minimize the impact of PHIX user costs for the provider and payer communities to promote HIE participation.
- Ensure fair distribution and equitable allocation of costs for the support of PHIX.
- Leverage existing sources of funding wherever possible (i.e., Public Health Programs, Centers for Medicare and Medicaid Services) for financing PHIX.
- Define the business case for PHIX, including the expected return on investment, business value and potential cost savings.
- Establish mechanisms and processes to effectively manage the funding and provide for the required reporting and accountability necessary to implement and manage PHIX.

# Financial Principles for Arkansas

## Suggestions from WG



- Idea 1: The State of Arkansas Health Information Exchange place a minimal (if any) financial burden on the taxpayers of Arkansas and instead place the financial reliance upon those individuals who actively receive benefit from this Exchange
  - Questions/Issues: Will this cover the cost? How large will the fee need to be? Too outrageous? How to collect? Cost of collecting? What basis for the charge? Will it be a disincentive to use? Ramifications of essential players not participating? Voluntary or Mandatory?
- Idea 2: The Arkansas HIE focus initial payment requirements on those who will initially receive the most direct financial benefit from using the HIE, and will “phase in” costs to the broader group receiving benefits as the Exchange increases abilities
  - Questions/Issues: Can part of a phase-in be a cost mechanism to be borne by all citizens of Arkansas?



# Financial Principles for Arkansas

## Suggestions from WG



- Idea 3: The Arkansas HIE requires financial investment, whether direct or indirect, for purchase/implementation/maintenance/sustainability/use from all participants/beneficiaries in one way or another
  - Questions/Issues: What about non-participants? Is there a “greater good” that raises the level of healthcare for all and improves public health initiatives because of HIE? Should non-participants bear some of the financial load?
- Idea 4: Allowable costs must be clearly defined
- Idea 5: Ongoing revenue must be easily collectable and come from stable sources of funding

# Financial Principles for Arkansas

## Suggestions from WG



- Idea 6: Depending on the amount needed (?) for start-up and then for sustainability, spread at least some portion of the cost on all AR citizens. We need a reliable funding steam into the future to sustain HIE.
- Idea 7: Search out other sources of funding – grants, foundations, AR companies and philanthropists but don't rely on them totally.
- Idea 8: I am in favor of most of the philosophies underpinning the operations in our example states, but continue to remain concerned that placing a cost on providers to participate will in the long run not benefit our HIE system. It is true that they will be a benefactor for their participation, but if they don't participate, the system will not work.



# Financial Principles for Arkansas' HIE System

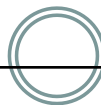
## What are our Recommendations?



# Governance Model:

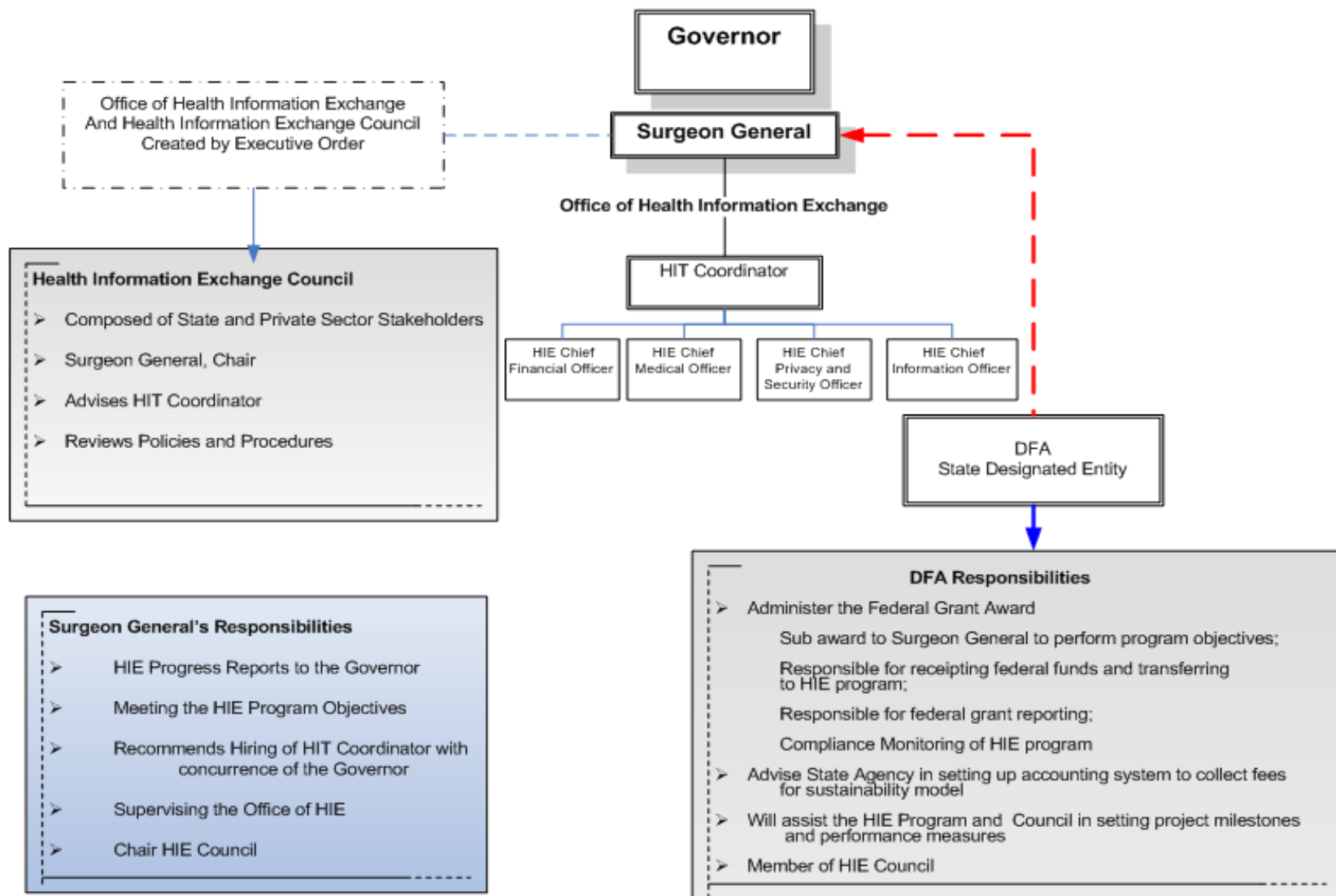
## Recommendations from the Arkansas HIE Governance Workgroup

# Governance: Transition Recommendations



Functions	Transition Model
<b>Governance</b>	<ul style="list-style-type: none"> <li>• State led</li> <li>• Governor ultimate authority</li> <li>• Surgeon General and HIT Coordinator report to Governor</li> <li>• HIT Coordinator oversees Office of HIE</li> </ul>
<b>Convening Stakeholders</b>	<ul style="list-style-type: none"> <li>• HIE Council (created by Exec. Order) - Chaired by SG and composed of private and public stakeholders</li> <li>• HIT/HIE Stakeholder's forum</li> </ul>
<b>Board of Directors</b>	<ul style="list-style-type: none"> <li>• No formal board</li> <li>• HIE Council</li> </ul>
<b>Own/operate the HIE</b>	<ul style="list-style-type: none"> <li>• HIE Council oversees operation of HIE</li> <li>• Operation of HIE may be conducted by selected operating entity</li> </ul>
<b>Legislation Required</b>	<ul style="list-style-type: none"> <li>• Office of HIE - created by Exec. Order</li> <li>• HIE Council created with Exec. Order</li> <li>• Legislation will be passed as needed in 2011 session regarding privacy/security and other functions as needed</li> </ul>
<b>Process for oversight and accountability</b>	
<b>Privacy and Security</b>	<ul style="list-style-type: none"> <li>• Privacy and Security Officer in Office of HIE</li> <li>• CIO in Office of HIE</li> </ul>
<b>Financing</b>	<ul style="list-style-type: none"> <li>• Advise State Agency in setting up accounting systems to collect fees for the sustainability model</li> <li>• CFO in Office of HIE</li> </ul>
<b>Rates</b>	

# Governance Model: Recommendation





# Finance Model Analysis

# Finance Model Q&A – Delaware



- Financing of the DHIN is split pretty evenly through about 1/3 federal grants, 1/3 private investment (commitments from major hospitals in the state) and 1/3 from the State of Delaware's 1:1 match of private investment
  - Private funding committed to \$9mm over 3 years; state matches private funding with general revenues; have \$1mm in state funding left after 3 years
  - Federal funding used to build new things, offer new functionalities,
  - Private & State funding used for ongoing costs: maintenance, day-to-day operations, system expenses (servers, interfaces, call centers, etc.)
- Initial functionality based on who could/should pay for it (all based on financing)
  - Focused on finding the transactions that saved most money; biggest savings found in reducing test duplication, so initial function of the DHIN is to upload and view test results, and the initial "fee structure" charges for each upload of testing results
  - Each line item expense is tracked as to who benefits – know expense, who uses & funds
  - If benefit is common, federal pays; stakeholders pay for specific benefits



# Finance Model Q&A – Delaware



- What is process? Charges are based on volume/share of transactions; how is that tracked/accounted for? What constitutes a chargeable transaction? Is transaction counted for sender or receiver, or both?
  - Charges are based on uploading information only - but test results are the only information currently on the system
  - For example, LabCorps pays every time they upload a CBC result
  - This is going to change – because ALL results are uploaded now, but only about 1/2 of providers are in DHIN – so paying for tests not accessible to physician who ordered, but others can still see results
  - Charges “include” ALL providers because they are based on tests regardless of provider or payor – so Medicare/Medicaid/self-insured are all included in system
- Transaction fee is based on number of transactions and that % is applied to public sector funds. What was the thought process used to come up with what fee is based on (ie why that way)? Is payment % directly proportional to % use, or is it weighted somehow?
  - % of payment is directly proportional to use; # of transactions are tracked to get %
  - Transaction fees charged ONLY on uploading, not accessing

# Finance Model Q&A – Delaware



- What is pattern of participation and use? Has use changed by those who are paying more/less?
  - Initial use focuses only on results delivery, so only used for that
  - About 1/2 of providers are in DHIN, but this is for viewing the test information only; individual providers do NOT upload/share/access EHRs (no cost savings)
- Is there any data from providers or patients about their happiness with use of the system?
  - DHIN did Survey Monkey about what providers want to see from new/upcoming functionalities
    - ✦ about 1/2 think they will use the existing test results delivery 1x/day
    - ✦ 80% agree or strongly agree that new functionalities will improve the efficiency of the system
    - ✦ 85% agree or strongly agree that it will improve patient care
    - ✦ Once potential users see the possibilities, digest that and get comfortable with it, their opinions change positively

# Finance Model Q&A – Delaware



- What is happening now? What is the future outlook?
  - In June 2009, DHIN added a patient piece so that patients can look into system for test results (not to upload or use any information)
  - Large increase in overall usage due to patients' ability to access test results
  - Big piece is how can this be more helpful to specialists
  - \$1mm left in state funding, talking to state now about how it will work to help pay for system (because still seeing benefit in various ways – public health, etc.)
  - Biggest concern is sustainability, are users willing to pay more for more functionality?

# Finance Model – Connect Arkansas/ Arkansas Capital Corp.



- Est. by Leg 2007 to: (1) Prepare the people and businesses of Arkansas to secure the economic, educational, health, social, and other benefits available via broadband use; and (2) Facilitate the availability of broadband service to every home and business in Arkansas.
- Received some ARRA HITECH funding for State Mapping/Data Delivery; eCommunity broadband/technology planning
- A partner with other agencies/orgs working to expand broadband access and capacity statewide (ASTA, UAMS, etc.)
- Exploring options for sustainable funding

# Finance Model – Information Network of AR



- Created 1995 by Leg. to create “electronic gateway” for public electronic access to public information
- Directed by 12 member Brd- 6 public; 6 private
- Contracts operation of INA to vendor National Information Consortium from Kansas who created the AR Information Consortium as a wholly owned sub.
- No Gen. Rev. funds appropriated for INS
- Operates on transaction fees and subscription fees
- Processed over 2.5M monetary transactions 2009
- Handled over \$500M in business tax payments to State
- More than 7000 companies have subscription plans

# Financing Ideas for Arkansas



- Membership fees
- Transaction fees
- Program/service fees
- Corporate sponsors
- Private sector donations/matching funds
- Loans from community stakeholders
- Private grants
- Public grant opportunities – federal, state
- State general revenues
- Bond-supported funding
- Institutional Stakeholder financing (ie Dept of Health, Medicaid, private hospitals, etc.)
- Individual Stakeholder financing (cell phone tax, pay per use, etc.)



# Financial Benefits of HIE – Overview

# Financial Benefits of HIE



Description	Years Covered (published)	\$\$ Savings	Health Improvement	Years to accrue benefit
Clinical & financial benefits of diabetes management systems	2007 (2007)	Estimate \$14.5 billion savings over 10 years	Increased screening rates for retinopathy (12.2% to 61.5%) and neuropathy screening (45% to 80%)	Results were reported after 10 years
Implement pharmacy bar code system at large, institutional level	2001-2006 (2007)	Annual savings of \$2.2 mm after fully operational	Adverse drug events due to dispensing errors decreased by 517 a year	1 year after becoming fully operational
CPOE at Brigham & Women's Hospital in Boston	1992-2002 (2006)	Annual savings: \$4.9 mm in health care costs (mostly ADEs), 2.78 mm due to efficiency productivity (mostly nurse time utilization)	Decreased drug use, decreased lab tests, decreased radiological utilization, decreased ADEs	Took 5 years for system to begin accruing net benefit, 7 years to accrue operating budget benefit
Feasibility of use and acceptance of PDAs by patients, change of care in ERs	Not available (2006)	Unspecified savings, 80% of doctors agreed PDAs increased efficiency	Changed drug choice in 21.5% of patients, changed other management in 8.3% of patients; 50% patients more confident in MD with PDA	



# Financial Benefits of HIE



Description	Years Covered (published)	\$\$ Savings	Health Improvement	Years to accrue benefit
Home health nurses w/heart failure patients given 2 different email reminders about care	2000-2001 (2005)	COST (not savings) = \$2,814 for usual care, \$3,371 for regular intervention, \$3,425 for highest intervention	Patients in highest care intervention group (email + other reminders) had more visits than traditional care; significant improvement in health score and self-reported quality of life	Unclear/not stated
E-prescribing system with clinical decision support & messaging interoperable with limited patient info	2002-2003 (2005)	\$1.00/new prescription decrease w/system vs. \$3.75 increase without; total savings \$863 per prescriber per month	Not noted	These results reported at 12 months
Estimate potential benefit of broad (90%) usage of EHRs nationally (hypothetical study)	1999-2000, unspecified years (2005)	\$77 billion/year at steady rate based on productivity gains; savings to U.S. health care industry \$81 billion/year	Health benefit from improved chronic disease management, safety & preventive care	n/a

# Financial Benefits of HIE



<b>Description</b>	<b>Years Covered (published)</b>	<b>\$\$ Savings</b>	<b>Health Improvement</b>	<b>Years to accrue benefit</b>
Determine costs & benefits of EHR in 14 small ambulatory practices	2004-2005 (2005)	Average revenue increase \$33k/FTE provider per year, approx 1/2 revenue due to reimbursement coding post-HER	Unclear, not widely or uniformly followed in all 14 practices	Average practice paid back EHR investment in 2.5 years; initial costs available
Value of HIE (predictive study assuming 10-year national implementation)	n/a (2005)	(in 2003 dollars), various reporting methods showing multi-billions in savings at four different levels of HIE	n/a	Savings begin in year 1
Computer-guided info for patients in addition to face-to-face time	Not available (2004)	Reduced clinician time per patient by 73%	No significant differences	n/a
Preventing Adverse Drug Events (ADEs) with information technology (hypothetical model)	Not available (2002)	Up to \$1.4 million annual savings in direct hospital costs in a large hospital	Reduced medical errors from 5.2-26.3%; model estimated saving 340-1,226 days of hospitalization overall	n/a



# Financial Incentives of Arkansas HIE Players & Payers

# HIE Players & Payers



- Individuals – Patients/Consumers
- Public Health
- Medicaid
- Other State Agencies & Programs
- Self-Insured (ie Employee Benefits Division)
- Private Insurers
- Labs
- Physicians, Clinics, Hospitals, Other Providers
- Data Users, Researchers, etc.

# HIE Players & Payers



- What is this player's cost now (without HIE)? Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?

\*\*There are many types of costs and incentives, but we want to focus only on the financial ones, something that we can now (or with more information) put a dollar amount on\*\*

# HIE Players & Payers



- Individuals – Patients/Consumers
  - What is cost to this player now (without HIE)? Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
  - What are the financial incentives/direct savings that will likely be realized with HIE?
  - Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
  - What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- **Public Health**

- What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- **Medicaid**

- What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?



# HIE Players & Payers



- Other State Agencies & Programs

- What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- Self-Insured (ie Employee Benefit Division)
  - What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
  - What are the financial incentives/direct savings that will likely be realized with HIE?
  - Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
  - What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- **Private Insurers**

- What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- Labs

- What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- Physicians, Other Providers
  - What is cost to this player now (without HIE)? Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
  - What are the financial incentives/direct savings that will likely be realized with HIE?
  - Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
  - What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- Clinics, Hospitals

- What is cost to this player now (without HIE)?  
Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
- What are the financial incentives/direct savings that will likely be realized with HIE?
- Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
- What are the notable financial DISincentives to this player with HIE?

# HIE Players & Payers



- Data Users, Researchers, etc.
  - What is cost to this player now (without HIE)? Consider ALL costs – direct financial (\$), time, other efficiencies, etc.
  - What are the financial incentives/direct savings that will likely be realized with HIE?
  - Can we estimated a dollar value \$ or % value of this player's financial incentives with HIE?
  - What are the notable financial DISincentives to this player with HIE?

# HIE: Players & Payers



- Is there a possibility of providing cost savings by shifting costs over to HIE to get the same information people pay for now?
- Which players pay less/more than their benefit now? Is there a way to convert them to pay appropriately for that benefit?
- Even if everyone paid what they “should” to equal their benefit, is that enough to support HIE?
- Where are the biggest savings?
- Where are the most direct financial savings?



# Future Meetings



- Homework: Potential Funding Sources
- Proposed April Meeting Schedule:
  - Friday, April 9 – 8-10:30am
  - Monday, April 19 – 2:30-4:30pm
  - Friday, April 30 – 8-10:30am